

1631/IFW



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: DEX0477US.NP
Inventors: Macina et al.
Serial No.: 10/553,436 ✓
Filing Date: March 21, 2006
Examiner: Zhou, Shubo
Customer No.: 32800
Group Art Unit: 1631
Confirmation No.: 6995
Title: Compositions, Splice Variants and
Methods Relating to Cancer Specific
Genes and Proteins

I, Kathleen A. Tyrrell, Registration No. 38,350,
certify that this correspondence is being deposited
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On this date: August 28, 2006


Kathleen A. Tyrrell, Registration No. 38,350

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

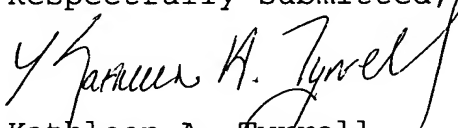
Pursuant to 37 C.F.R. §1.56 and in accordance with 37 C.F.R.
§§1.97-1.98, information relating to the above-identified
application is hereby disclosed. Inclusion of information in
this statement is not to be construed as an admission that this
information is material as that term is defined in 37 C.F.R.
§1.56(b).

- (XX) In accordance with §1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in §1.491, or before the mailing date of a first Office Action on the merits of the above-identified application, no additional fee is required.
- () In accordance with §1.97(c), this Information Disclosure Statement is being filed after the period set forth in §1.97(b) above but before the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311, therefore:
- () Certification in Accordance with §1.97(e) is attached hereto; or
- () Authorization to charge Deposit Account No. 50-1619 the fee of \$180.00 as set forth in §1.17(p) is provided.
- () In accordance with §1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under §1.113 or a Notice of Allowance under §1.311 but before the payment of the Issue Fee, therefore included are: Certification in Accordance with §1.97(e); Petition Requesting Consideration of the Information Disclosure Statement; and the fee of \$130.00 as set forth in §1.17(I) (1).
- (XX) Copies of each of the references listed on the attached Form PTO-1449 (modified) are enclosed herewith. In view of the voluminous nature of Reference BD, only pages 1-171, Sequence #3758 and corresponding Figure 3758 are provided.

() In accordance with §1.98(d), copies of some or all of the references listed on the attached Form PTO-1449 (modified) are not enclosed herewith because they were previously submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____, filed _____, for which a claim for priority under 35 U.S.C. §120 has been made in the instant application.

Please charge any deficiency or credit any overpayment to Deposit Account No. 50-1619. This form is submitted in duplicate.

(XX) All listed references are in the English language with the exception of References AI and AJ for which English Abstracts are provided.

Respectfully submitted,

Kathleen A. Tyrrell
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Date: August 25, 2006

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Sheet 01 of 14

Form PTO-1449 Modified List of Patents and Publications Cited by Applicant (Use several sheets if necessary) U.S. Department of Commerce	Docket No. DEX0477US.NP	Serial No. 10/553,436
	Applicant Macina et al.	
	Filing Date March 21, 2006	Group 1631

U. S. PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Name	Class	Subclass
	AA	US2003/0118592	6-26-03	Ledbetter et al.	424	178.1

FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES	NO
	AB	WO 01/94629	12-13-01	PCT	x	
	AC	WO 03/059379	7-24-03	PCT	x	
	AD	WO 02/29103	4-11-02	PCT	x	
	AE	WO 2004/044178	5-27-04	PCT	x	
	AF	WO 2004/110345	12-23-04	PCT	x	

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Examiner Initial		Document No.	Date	Country	Translation YES NO
	AH	EP 0 618 292	10-5-94	EPO	x
	AI	JP 2004 049122	2-19-04	Japan	English Abstract only
	AJ	DE 103 16 701	11-4-04	Germany	English Abstract only
	AK	WO 2003/008537	1-30-03	PCT	x

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	AL	WO 02/081646	10-17-02	PCT	x	
	AM	WO 02/086443	10-31-02	PCT	x	
	AN	WO 02/103028	12-27-02	PCT	x	
	AO	WO 2004/022709	3-18-04	PCT	x	
	AP	WO 03/016475	2-27-03	PCT	x	

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	AQ	WO 02/078524	10-10-02	PCT	x	
	AR	WO 02/070751	9-12-02	PCT	x	
	AS	WO 96/25173	8-22-96	PCT	x	
	AT	WO 2004/092216	10-28-04	PCT	x	
	AU	EP 1 439 393	7-21-04	EPO	x	

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	AV	WO 2004/072287	8-26-04	PCT	x	
	AW	WO 2004/052917	6-24-04	PCT	x	
	AX	WO 01 24832	4-12-01	PCT	x	
	AY	WO 02/22803	3-21-02	PCT	x	
	AZ	WO 2004/031238	4-15-04	PCT	x	

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FOREIGN PATENT DOCUMENTS

Examiner Initial		Document No.	Date	Country	Translation YES NO	
	BA	WO 94/16716	8-4-94	PCT	x	
	BB	WO 2004/099247	11-18-04	PCT	x	
	BC	WO 03/082317	10-9-03	PCT	x	
	BD	WO 2004/060270	7-22-04	PCT	x	

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)			
	CA	Aoki et al., "Detection of Peritoneal Micrometastases by Reverse Transcriptase-Polymerase Chain Reaction Targeting Carcinoembryonic Antigen and Cytokeratin 20 in Colon Cancer Patients", J. Exp. Clin. Cancer Res. 2002 21(4):555-562	
	CB	Barnett et al., "Workshop Report:Proposed Nomenclature for the Carcinoembryonic Antigen (CEA) Gene Family", Tumor Biol. 1990 11:59-63	
	CC	Barnett et al., "Carcinoembryonic Antigens:Alternative Splicing Accounts for the Multiple mRNAs that Code for Novel Members of the Carcinoembryonic Antigen Family", J. Cell Biology 1989 108:267-276	
	CD	Barnett et al., "Carcinoembryonic Antigen Family:Characterization of cDNAs Coding for NCA and CEA and Suggestion of Nonrandom Sequence Variation in Their Conserved Loop-Domains", Genomics 1988 3:59-66	
	CE	Barnett et al., "Human Biliary Glycoprotein Gene:Characterization of a Family of Novel Alternatively Spliced RNAs and Their Expressed Proteins", Molecular and Cellular Biology 1993 13(2):1273-1282	
	CF	Beauchemin et al., "Isolation and Characterization of Full-Length Functional cDNA Clones for Human Carcinoembryonic Antigen", Molecular and Cellular Biology 1987 7(9):3221-3230	
	CG	Booth et al., "Phosphatidylinositol 3-Kinases in Carcinoembryonic Antigen-related Cellular Adhesion Molecule-mediated Internalization of <i>Neisseria gonorrhoeae</i> ", J. Biol. Chem. 2003 278(16):14037-14045	
	CH	Hampton et al., "Differential expression of carcinoembryonic antigen (CEA) splice variants in whole blood of colon cancer patients and healthy volunteers:implication for the detection of circulating colon cancer cells", Oncogene 2002 21:7817-7823	
	CI	Hinoda et al., "Molecular cloning of a cDNA coding biliary glycoprotein I:Primary structure of a glycoprotein immunologically crossreactive with carcinoembryonic antigen", Proc. Natl. Acad. Sci. USA 1988 85:6959-6963	
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	CJ	Ilantzis et al., "Deregulated Expression of the Human Tumor Marker CEA and CEA Family Member CEACAM6 Disrupts Tissue Architecture and Blocks Colonocyte Differentiation", Neoplasia 2002 4(2):151-163	
	CK	Inazawa et al., "Regional assignment of nonspecific cross-reacting antigen (NCA) of the CEA gene family to chromosome 19 at band ql3.2", Cytogenet Cell Genet 1989 52:28-31	
	CL	Kamarck et al., "Carcinoembryonic antigen family:Expression in a mouse L-cell transfectant and characterization of a partial cDNA in bacteriophage λ gt11", Proc. Natl. Acad. Sci. USA 1987 84:5350-5354	
	CM	Khan et al., "Identification of Three New Genes and Estimation of the Size of the Carcinoembryonic Antigen Family", Genomics 1992 14:384-390	
	CN	Kirshner et al., "CEACAM1-4S, a cell-cell adhesion molecule, mediates apoptosis and reverts mammary carcinoma cells to a normal morphogenic phenotype in a 3D culture", Proc. Natl. Acad. Sci. USA 2003 100(2):521-526	
	CO	Kuroki et al., "Three Novel Molecular Forms of Biliary Glycoprotein Deduced From cDNA Clones from a Human Leukocyte Library", Biochemical and Biophysical Research Communications 1991 176(2):578-585	
	CP	Kuroki et al., "Molecular Cloning of Nonspecific Cross-reacting Antigens in Human Granulocytes", J. Biol. Chem. 1991 266(18):11810-11817	
	CQ	Louhimo et al., "Serum HCG β , CA 72-4 and CEA are Independent Prognostic Factors in Colorectal Cancer", Int. J. Cancer 2002 101:545-548	
	CR	Markel et al., "Pivotal role of CEACAM1 protein in the inhibition of activated decidual lymphocyte functions", J. Clin. Invest. 2002 110(7):943-953	
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	CS	Markel et al., "CD66a Interactions Between Human Melanoma and NK Cells: A Novel Class I MHC-Independent Inhibitory Mechanism of Cytotoxicity", J. Immunol. 2002 168:2803-2810	
	CT	Muenzner et al., "Nuclear Factor- κ B Directs Carcinoembryonic Antigen-related Cellular Adhesion Molecule 1 Receptor Expression in <i>Neisseria gonorrhoeae</i> -infected Epithelial Cells", J. Biol. Chem. 2002 277(9):7438-7446	
	CU	Nagel et al., "Genomic organization, splice variants and expression of <i>CGM1</i> , a CD66-related member of the carcinoembryonic antigen gene family", Eur. J. Biochem. 1993 214:27-35	
	CV	Neumaier et al., "Characterization of a cDNA Clone for the Nonspecific Cross-reacting Antigen (NCA) and a Comparison of NCA and Carcinoembryonic Antigen", J. Biol. Chem. 1988 263(7):3202-3207	
	CW	Neumaier et al., "Biliary glycoprotein, a potential human cell adhesion molecule, is down-regulated in colorectal carcinomas", Proc. Natl. Acad. Sci. USA 1993 90:10744-10748	
	CX	Oikawa et al., "Primary Structure of Human Carcinoembryonic Antigen (CEA) Deduced from cDNA Sequence", Biochemical and Biophysical Research Communications 1987 142(2):511-518	
	CY	Schrewe et al., "Cloning of the Complete Gene for Carcinoembryonic Antigen: Analysis of Its Promoter Indicates a Region Conveying Cell Type-Specific Expression", Molecular and Cellular Biology 1990 10(6):2738-2748	
	CZ	Singer et al., "Carcinoembryonic Antigen-Related Cell Adhesion Molecule 1 Expression and Signaling in Human, Mouse, and Rat Leukocytes: Evidence for Replacement of the Short Cytoplasmic Domain Isoform by Glycosylphosphatidylinositol-Linked Proteins in Human Leukocytes", J. Immunol. 2002 168:5139-5146	
	DA	Strausberg et al., "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences", Proc. Natl. Acad. Sci. USA 2002 99(26):16899-16903	
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	DB	Taheri et al., "The Adhesion and Differentiation-inhibitory Activities of the Immunoglobulin Superfamily Member, Carcinoembryonic Antigen, Can Be Independently Blocked", J. Biol. Chem. 2003 278(17):14632-14639	
	DC	Tawaragi et al., "Primary Structure of Nonspecific Crossreacting Antigen (NCA) A Member of Carcinoembryonic Antigen (CEA) Gene Family, Deduced from cDNA Sequence", Biochemical and Biophysical Research Communications 1988 150(1):89-96	
	DD	Thies et al., "CEACAM1 Expression in Cutaneous Malignant Melanoma Predicts the Development of Metastatic Disease", J. Clinical Oncology 2002 20(10):2530-2536	
	DE	Thompson et al., "Long-Range Chromosomal Mapping of the Carcinoembryonic Antigen (CEA) Gene Family Cluster", Genomics 1992 12:761-772	
	DF	Volpert et al., "Inhibition of Prostate Tumor Angiogenesis by the Tumor Suppressor CEACAM1", J. Biol. Chem. 2002 277(38):35696-35702	
	DG	Lewicki et al., "Quaternary Structure of Coronavirus Spikes in Complex with Carcinoembryonic Antigen-related Cell Adhesion Molecule Cellular Receptors", J. Biol. Chem. 2002 277(22):19727-19734	
	DH	Watt et al., "CD66 Identifies the Biliary Glycoprotein (BGP) Adhesion Molecule:Cloning, Expression, and Adhesion Functions of the BGPs Splice Variant", Blood 1994 84(1):200-210	
	DI	Zimmermann et al., "Chromosomal Localization of Carcinoembryonic Antigen Gene Family and Differential Expression in Various Tumors", Cancer Research 1988 48:2550-2554	
	DJ	Zimmermann et al., "Isolation and characterization of cDNA clones encoding the human carcinoembryonic antigen reveal a highly conserved repeating structure", Proc. Natl. Acad. Sci. USA 1987 84:2960-2964	
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	DK	NCBI Genbank Accession No: NP_002474 [gi:40255013] with Revision History March 19, 1999 - October 27, 2004	
	DL	NCBI Genbank Accession No: AAA51972 [gi:180241] with Revision History March 15, 1988 - November 1, 1994	
	DM	NCBI Genbank Accession No: AK223101 [gi:62897762] with Revision History April 26, 2005	
	DN	NCBI Genbank Accession No: NP_004354 [gi:11386171] with Revision History for 11386171 replaced by 98986445 Novemer 28, 2000 - August 20, 2004	
	DO	NCBI Genbank Accession No: CAA34474 [gi:825638] with Revision History April 29, 1991 - August 4, 2003 (PRI July 19, 1995)	
	DP	NCBI Genbank Accession No: AAA51963 [gi:180199] with Revision History May 20, 1987 - November 1, 1994	
	DQ	NCBI Genbank Accession No: AAH34671 [gi:21961634] with Revision History July 26, 2002 - June 19, 2006	
	DR	NCBI Genbank Accession No: AAH14473 [gi:15680237] with Revision History September 19, 2001 - September 28, 2005	
	DS	NCBI Genbank Accession No: NM_001815 [gi:4502792] with Revision History March 19, 1999 - July 8, 2004	
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	DT	NCBI Genbank Accession No: NP_001703 [gi:19923195] with Revision History March 19, 1999 - August 21, 2004	
	DU	NCBI Genbank Accession No: M16234 [gi:180240] with Revision History March 15, 1988 - November 1, 1994	
	DV	NCBI Genbank Accession No: M59709 [gi:180208] with Revision History January 16, 1991 - March 6, 1995	
	DW	NCBI Genbank Accession No: M17191 [gi:180224] with Revision History March 15, 1989 - November 1, 1994	
	DX	NCBI Genbank Accession No: M17303 [gi:178676] with Revision History June 15, 1988 - June 7, 1997 (PRI August 8, 1995)	
	DY	NCBI Genbank Accession No: BC034671 [gi:21961633] with Revision History July 26, 2002 - June 19, 2006	
	DZ	NCBI Genbank Accession No: X16455 [gi:29854] with Revision History April 29, 1991 - August 4, 2003 (PRI July 19, 1995)	
	EA	NCBI Genbank Accession No: AC008999 [gi:15281189] with Revision History August 3, 1999 - August 23, 2001	
	EB	NCBI Genbank Accession No: NM_002483 [gi:40255012] with Revision History March 19, 1999 - August 23, 2004	
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	EC	NCBI Genbank Accession No: NM_001712 [gi:19923194] with Revision History for 19923194 replaced by 68161539 March 19, 1999 - July 8, 2004	
	ED	NCBI Genbank Accession No: AAH05008 [gi:13477107] with Revision History March 28, 2001 - June 30, 2004	
	EE	NCBI Genbank Accession No: NM_004363 [gi:11386170] with Revision History for 11386170 replaced by 98986444 November 28, 2000 - December 18, 2004	
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	EG	NCBI Genbank Accession No: M15042 [gi:180198] with Revision History May 20, 1987 - November 1, 1994	
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	EL	NCBI Genbank Accession No: AAA62835 [gi:180211] with Revision History January 1, 1990 - March 6, 1995	
	EM	NCBI Genbank Accession No: P40199 [gi:20455477] with Revision History February 1, 1995 - October 1, 2004	
	EN	NCBI Genbank Accession No: P31997 [gi:6166048] with Revision History July 1, 1993 - October 1, 2004	
	EO	NCBI Genbank Accession No: 88918 with Revision History January 1, 1990 - July 23, 1999	
	EP	NCBI Genbank Accession No: 86964 [gi:86964] with Revision History January 1, 1990 - March 10, 2005 (PRI July 23, 1999)	
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